

THE CLAIMS

What is claimed is:

1. A dispensing apparatus feeding device that includes a main body comprising:

a push rod oriented longitudinally through the dispensing apparatus, wherein the push

5 rod comprises a forwarding piece a forward end and a knob at a rearward end;

a first section which comprises a connecting plate;

a second section which comprises a coupling attached to the main body by a driving
shaft and having a hindered bulge on a side of the coupling, a connecting part at a lower end of
the coupling that is adapted and configured to connect with the connecting plate, and a hole in
10 a center of the coupling to receive the driving shaft, wherein a central portion of the coupling
comprises:

a first recess adapted to receive one or more driving pieces, at least one of which
comprises an upper through-hole adapted to receive the push rod and permit it to pass
therethrough and a lower through-hole to receive a bulge of a spacing block; and

15 a second recess adapted to receive a braking piece that cooperates with a
braking bumper pin provided on the main body, with each recess being disposed adjacent the
hole and on opposite sides thereof;

a gun body uniting section; and

a fixed handle comprising an active trigger pin-jointed thereon that has a curving
20 portion adapted to receive fingers,

wherein the connecting plate is rotatably attached at one end to an upper end of the
trigger while the other end of the connecting plate is rotatably attached with a lower end of the
coupling, with a spring-catching flange for catching a first spring being provided in a central
part of the connecting plate, and

25 wherein the push rod passes through the gun body uniting section, and passes
successively through the braking piece, a second spring, the upper through hole in the driving
pieces, a third spring, and a spring-catching piece in the second section of the main body.

2. The dispensing apparatus of claim 1, wherein the coupling is pin-jointed to the
30 second section, the active trigger is pin-jointed to the fixed handle, and the rotatable

attachments each comprise a hinge.

3. The dispensing apparatus of claim 1, wherein the connecting part comprises a hinging hole.

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4. The dispensing apparatus of claim 1, wherein the main body further comprises an adjusting screw having a length sufficient to contact the driving pieces.

5. The dispensing apparatus of claim 1, which further comprises an adjusting screw arranged so that the push rod and the driving pieces tend to be perpendicular to each other.

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6. The dispensing apparatus of claim 1, wherein the driving pieces and the braking piece comprise the same structure, and the driving pieces include two which are assembled via the spacing block.

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7. The dispensing apparatus of claim 6, wherein the gun body uniting section comprises an assembling hole that can connect a union screw and a single-sided plate.

8. The dispensing apparatus of claim 7, wherein the main body comprises a rib flange.

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9. The dispensing apparatus of claim 8, wherein in a back part of the main body, a sheath is mounted adjacent where the push rod further passes through the main body.

10. A single-cartridge dispensing apparatus comprising the feeding device of claim 1.

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11. A dispensing apparatus which comprises:

a push rod oriented longitudinally through the dispensing apparatus, wherein the push rod comprises a forwarding piece to advance a portion of the cartridge at a forward end, and a knob at a rearward end;

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a first section which comprises a connecting plate that connects an active trigger to a coupling;

a second section comprises the coupling attached to the main body by a driving shaft and having a hindered bulge on a side of the coupling that hinders counter-clockwise motion of the coupling, the coupling being connected at a lower end with the connecting plate, and a hole in a center of the coupling to receive the driving shaft, wherein a central portion of the coupling comprises:

a first recess adapted to receive one or more driving pieces, at least one of which comprises an upper through-hole adapted to receive the push rod and permit it to pass

therethrough and a lower through-hole to receive a bulge of a spacing block; and

a second recess adapted to receive a braking piece that cooperates with a braking bumper pin provided on the main body, with each recess being disposed adjacent the hole and on opposite sides thereof; and

a fixed handle comprising the active trigger pin-jointed thereon that has a curving portion adapted to receive fingers,

wherein the connecting plate is rotatably attached at one end to an upper end of the trigger while the other end of the connecting plate is rotatably attached with a lower end of the coupling, with a spring-catching flange for catching a first spring being provided in a central part of the connecting plate, and

wherein the push rod passes through a gun body uniting section, and successively through the braking piece, a second spring, the upper through hole in the driving pieces, a third spring, and a spring-catching piece in the second section of the main body.

12. A dispensing apparatus comprising:

a push rod oriented longitudinally through the dispensing apparatus that comprises a forwarding piece to advance a portion of the cartridge at a forward end to dispense pasty fluid therefrom;

a fixed handle comprising an active trigger pin-jointed thereon that has a curving portion adapted to receive fingers to facilitate accurate dispensing;

a connecting plate that rotatably connects an upper end of the active trigger to a

rotatable coupling having a hindered bulge on a side to hinder counter-clockwise motion thereof, and that includes a spring-catching flange for catching a first spring being provided in a central part of the connecting plate; and

a main body attached to the coupling and being adapted and configured to advance the push rod via a driving shaft that is operatively associated to the push rod, wherein the coupling comprises a plurality of recesses adapted to receive one or more driving pieces and at least one braking piece.

13. The dispensing apparatus of claim 12, wherein the braking piece is internal to the main body and adjacent to the coupling.

14. The dispensing apparatus of claim 12, wherein the coupling is connected at a lower end with the connecting plate.

15. The dispensing apparatus of claim 12, wherein the coupling comprises a hole in a center thereof to receive the driving shaft.

16. The dispensing apparatus of claim 12, wherein the plurality of recesses are provided in a central portion of the coupling.

17. The dispensing apparatus of claim 12, wherein the plurality of recesses are provided on opposing sides of the coupling.

18. The dispensing apparatus of claim 12, wherein the push rod passes through a gun body uniting section, and successively through the at least one braking piece, a second spring, the at least one recess in the driving pieces, a third spring, and a spring-catching piece in the second section of the main body.

19. The dispensing apparatus of claim 12, wherein the apparatus comprises a caulk gun and the pasty fluid comprises caulk.